

REMARKS

Claims 1-6, 10-16 and 20-27 are pending in this application. By this Amendment, claims 1-6 and 10-16 and 20 are amended, and claims 7-9 and 17-19 are canceled without prejudice to or disclaimer of the subject matter contained therein. Further, new claims 21-27 are added. No new matter has been added.

The courtesies extended to Applicant's representative by Examiner Pappas at the interview held August 24, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute record of the interview.

The Office Action rejects claims 1-4, 9, 11-14 and 19 under 35 U.S.C. §103(a) over Foley (Computer Graphics: Principles and Practice) in view of Deering (U.S. Patent Publication No. 2003/001161881); rejects claims 5-6 and 15-16 under 35 U.S.C. §103(a) over Foley in view of Deering and further in view Berry (U.S. Patent No. 5,704,025); and rejects claims 7-8, 10, 17-18 and 20 under 35 U.S.C. §103(a) over Foley in view of Deering and further in view of Baldwin (U.S. Patent No. 5,764,228). Applicant respectfully traverses the rejections.

In particular, none of the applied references disclose or suggest drawing an image viewable from a virtual camera in an object space and in drawing order determined by the sorting processing while performing hidden-surface erasing based on a Z-buffer process for the objects of which alpha values are varied, as recited in independent claim 1, and similarly recited in independent claims 10, 11, 20, 21 and 27.

Foley discloses at page 610 that depth cueing exploits the fact that distant objects appear dimmer than closer objects, especially if seen through haze. Such effects can be sufficiently convincing that artists refer to use of changes in intensity (as well as in texture,

sharpness, and color). However, Foley does not disclose or suggest the above-noted features of the claims.

Deering does not compensate for the above-noted deficiencies of Foley. Deering discloses an alpha blending process. Specifically, Deering discloses on page 1, paragraph 0011 that fogging is a special case of alpha blending in which the degree of alpha changes with distance so that the object appears to have vanished into a haze as the object moves away from the viewer.

Baldwin teaches away the above-noted features of the claims. Specifically, Baldwin discloses at col. 49, lines 13-24 that when using GLINT to render anti-aliased polygons, depth buffering cannot be used.

Berry does not compensate for the above-noted deficiencies of Foley, Deering and Baldwin.

Berry at col. 6, lines 23-28 discloses that the vertex parameters may include, for each vertex, X, Y and Z coordinates, normal coordinates (NX, NY, NZ) color values (R, G, B and α) and texture mapping values (S and T).

In summary, independent claims 1, 10, 11, 20, 21 and 27 define patentable subject matter. Claims 2-6, 12-16 and 22-26 depend from the respective independent claims, and therefore also define patentable subject matter. Accordingly, withdrawal of the rejections under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-6, 10-16 and 20-27 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Petition for Extension of Time
Amendment Transmittal

Date: September 7, 2004

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